

Application No. 10/593,972
Reply to Office Action of

IN THE CLAIMS

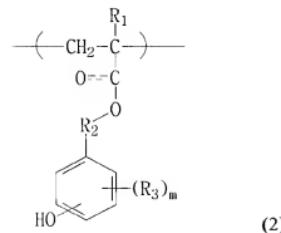
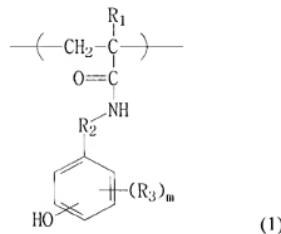
Please amend the claims as follows:

Claims 1-18: (Canceled).

19. (New) A process for producing a plated shaped article, comprising:

(1) a step of forming on a wafer having a barrier metal layer a resin film composed of the negative radiation-sensitive resin composition, wherein the negative radiation-sensitive resin composition comprises:

(A) a polymer containing structural units represented by the following formula (1) or structural units represented by the following formula (1) and the following formula (2):



wherein R₁ is a hydrogen atom or a methyl group, R₂ is -(CH₂)_n, n is an integer of 0 to 3, R₃ is an alkyl group of 1 to 4 carbon atoms, and m is an integer of 0 to 4,

(B) a compound having at least one ethylenically unsaturated double bond, and

(C) a radiation-sensitive radical polymerization initiator which is at least one compound selected from acylphosphine oxides, 2,2-dimethoxyl-1,2-diphenylethane-1-one, benzyl dimethyl ketal, benzyl- β -methoxyethyl acetal, 1-phenyl-1,2-propanedione-2-(o-ethoxycarbonyl) oxime and 2,2'-bis(2,4-dichlorophenyl)-4,5,4',5'-tetraphenyl-1-2'-bisimidazole;

(2) a step of exposing the resin film and then developing the resin film to form a pattern,

(3) a step of depositing an electrode material by electroplating using the pattern as a mold, and

(4) a step of stripping the remaining resin film and then removing the barrier metal by etching.

20. (New) The method of Claim 19, wherein the component (B) is contained in an amount of 30 to 80 parts by weight based on 100 parts by weight of the component (A).

21. (New) The method of Claim 19, wherein the component (C) is contained in an amount of 15 to 30 parts by weight based on 100 parts by weight of the component (A).

22. (New) The method of Claim 19, wherein the negative radiation-sensitive resin composition further comprises an organic solvent (D).

23. (New) The method of Claim 19, wherein the resin film has a film thickness of 5 to 200 μm .

24. (New) The method of Claim 19, wherein the radiation-sensitive radical polymerization initiator which is at least two compounds selected from the group consisting of acylphosphine oxides, 2,2-dimethoxyl-1,2-diphenylethane-1-one, benzyl dimethyl ketal, benzyl- β -methoxyethyl acetal, 1-phenyl-1,2-propanedione-2-(o-ethoxycarbonyl) oxime and 2,2'-bis(2,4-dichlorophenyl)-4,5,4',5'-tetraphenyl-1-2'-bisimidazole.

25. (New) The method of Claim 19, wherein (C) comprises 2,2-dimethoxy-1,2-diphenylethane-1-one and 2,4,6-trimethylbenzoyldiphenylphosphine oxide.

26. (New) The method of Claim 19, wherein the polymer contains structural units represented by formula (1) and not units of formula (2).

27. (New) The method of Claim 19, wherein the polymer contains structural units represented by the formula (1) and formula (2).